

WHAT IS CLAIMED IS:

1. A method for transmitting objects in a distributed system comprised of multiple machines, comprising:

specifying an object associated with a request for notification of a particular event within the system;

converting the object into a stream containing a self-describing form of the object; and  
providing the stream for selective transmission to a machine where the object is reconstructed by accessing program code identified in the stream upon occurrence of the event.

2. The method of claim 1 wherein the providing includes  
storing the stream prior to the selective transmission.

3. The method of claim 1 wherein the converting includes  
packaging the object in an unconstructed package including a reference to the program code for reconstructing the object.

4. A method for processing objects in a distributed system comprised of multiple machines, comprising:

receiving at a first machine a stream containing a self-describing form of an object associated with a request for notification of a particular event within the system;

determining whether to send the stream to a second machine; and

LAW OFFICES

WENEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N.W.  
WASHINGTON, DC 20005  
202-408-4000

selectively sending the stream to the second machine for reconstruction of the object by accessing program code identified in the stream, the first machine providing notification of the event.

5. An apparatus for transmitting objects in a distributed system comprised of multiple machines, comprising:

a module configured to specify an object associated with a request for notification of a particular event within the system;

a module configured to convert the object into a stream containing a self-describing form of the object; and

a module configured to provide the stream for selective transmission to a machine where the object is reconstructed by accessing program code identified in the stream upon occurrence of the event.

6. The apparatus of claim 5 wherein the providing module includes

a module configured to store the stream prior to the selective transmission.

7. The apparatus of claim 5 wherein the converting module includes

a module configured to package the object in an unconstructed package including a reference to the program code for reconstructing the object.

8. An apparatus for processing objects in a distributed system comprised of multiple machines, comprising:

a module configured to receive at a first machine a stream containing a self-describing form of an object associated with a request for notification of a particular event within the system;

a module configured to determine whether to send the stream to a second machine; and

a module configured to selectively send the stream to the second machine for reconstruction of the object by accessing program code identified in the stream, the first machine providing notification of the event.

9. A system for transmitting objects in a distributed system comprised of multiple machines, comprising:

a first machine;

a second machine;

a network connecting the first machine with the second machine; and

an apparatus for transmitting objects in the system, the apparatus including:

a module configured to specify an object associated with a request for notification of a particular event within the system;

a module configured to convert the object into a stream containing a self-describing form of the object; and

a module configured to provide the stream for selective transmission to a machine where the object is reconstructed by accessing program code identified in the stream upon occurrence of the event.

10. The system of claim 9 wherein the providing module includes  
a module configured to store the stream prior to the selective transmission.
11. The system of claim 9 wherein the converting module includes  
a module configured to package the object in an unconstructed package including a reference to the program code for reconstructing the object.
12. A system for transmitting objects in a distributed system comprised of multiple machines, comprising:
  - a first machine;
  - a second machine;
  - a network connecting the first machine with the second machine; and
  - an apparatus for transmitting objects in the system, the apparatus including:
    - a module configured to receive at the first machine a stream containing a self-describing form of an object associated with a request for notification of a particular event within the system;
    - a module configured to determine whether to send the stream to the second machine; and

a module configured to selectively send the stream to the second machine for reconstruction of the object by accessing program code identified in the stream, the first machine providing notification of the event.

13. A computer program product, comprising:

a computer-readable medium containing instructions for controlling a computer system to perform a method, the method including:

specifying an object associated with a request for notification of a particular event within the system;

converting the object into a stream containing a self-describing form of the object; and

providing the stream for selective transmission to a machine where the object is reconstructed by accessing program code identified in the stream upon occurrence of the event.

14. The computer program product of claim 13 wherein the providing includes storing the stream prior to the selective transmission.

15. The computer program product of claim 13 wherein the converting includes packaging the object in an unconstructed package including a reference to the program code for reconstructing the object.

16. A computer program product, comprising:

LAW OFFICES

JNEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N. W.  
WASHINGTON, DC 20005  
202-408-4000

a computer-readable medium containing instructions for controlling a computer system to perform a method, the method including:

receiving at a first machine a stream containing a self-describing form of an object associated with a request for notification of a particular event within the system;

determining whether to send the stream to a second machine; and

selectively sending the stream to the second machine for reconstruction of the object by accessing program code identified in the stream, the first machine providing notification of the event.

17. An article of manufacture specifying a representation of an object stored in a computer-readable storage medium and capable of electronic transmission between machines in a distributed system, the article of manufacture comprising:

a first object comprising a self-describing stream stored in a computer-readable storage medium, the first object being associated with a second object specifying a request for notification of an event in the system, the first object having a property indicating that the first object is to be maintained as the stream when the first object is transmitted between machines in the system unless occurrence of the event is detected.

18. The article of manufacture of claim 17 wherein the stream includes computer-readable instructions for use in reconstructing the second object.

LAW OFFICES

WENEGAN, HENDERSON,  
FARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N. W.  
WASHINGTON, DC 20005  
202-408-4000

19. The article of manufacture of claim 17 wherein the stream includes a location of computer-readable instructions for use in reconstructing the second object.

20. An apparatus for transmitting objects in a distributed system comprised of multiple machines, comprising:

means for specifying an object associated with a request for notification of a particular event within the system;

means for converting the object into a stream containing a self-describing form of the object; and

means for providing the stream for selective transmission to a machine where the object is reconstructed by accessing program code identified in the stream upon occurrence of the event.

LAW OFFICES

JNEGAN, HENDERSON,  
PARABOW, GARRETT,  
& DUNNER, L.L.P.  
1300 I STREET, N.W.  
WASHINGTON, DC 20005  
202-408-4000